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| 10/701,501 | 11/06/2003 | Sang Chul Yoon | P23893 | 7636 |
| 7055 | 7590 | 01/04/2005 | EXAMINER | |
| GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 | | | RAPP, CHAD | |
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| | | | 2125 | |
| DATE MAILED: 01/04/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/701,501

Applicant(s)

YOON ET AL.

Examiner

Chad Rapp

Art Unit

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-- The MAILING DATE f this communication appears n th cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 11-14, 16-18, 20-23, 25-27 and 29-32 is/are rejected.
7) ☒ Claim(s) 15, 19, 24 and 28 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. Claims 11-32 are presented for examination.

Information Disclosure Statement

2. Missing PTO 1449. Applicant has stated on page 9 of the amendment filed on September 24, 2004 that a PTO-1449 was provided listing each U.S. Patent Application Publication that corresponds to each previously cited U.S. non-published application. No PTO-1449 has been submitted, therefore the examiner has considered initialed and signed the information disclosure statement sheet which provides the copending, commonly assigned U.S. Patent applications.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 23, "The control system" should be changed to "The method" There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

4. Claims 15, 19, 24 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krzyzanowski et al.(herein referred as Kr) further in view of Ito et al. and further in view of Saito et al.

Kr. teaches the claimed invention (claim 11) substantially as claimed including a control system for conditioning air comprising :

a. An electronic device that executes a control program is taught as the portable device as a computer client([0048] and [0047]).

Kr teaches the above listed details of the independent claim 11, however, Kr does not teach: a registration module configured by a remote user to store profile information including an identification of a controlling system to be controlled, a data packet creation module that generates a control command data packet based on said stored profile information and a control command inputted by the remote user and a data packet transmitter that transmits said generated control command data packet over a communication link to the conditioning system associated with said profile information to control an operation of the conditioning system.

Ito et al. teaches :

a. A registration module configured by a remote user to store profile information including an identification of a controlling system to be controlled is taught as the apparatus control table (col. 6 lines 37-67).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Ito et al. because Ito et al. deals with remote home appliance operating system such as an air conditioner using telephones and telephone to make it simpler and easier to use the telephone as a remote controlling device that can change various profile parameters of the air conditioner.

Saito et al. teaches :

- a. A data packet creation module that generates a control command data packet based on said stored profile information and a control command inputted by the remote user is taught as the IP packet are processed with destination IP address, source address and commands(page 3);
- b. A data packet transmitter that transmits said generated control command data packet over a communication link to the conditioning system associated with said profile information to control an operation of the conditioning system is taught as the IP packet is transmitted(page 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Saito et al. because Saito et al. discloses a system for home digital electronic control through a public network; a PSTN. Also it describes the example of an a air conditioner it allows the computer to store correspondence data and combine this data with command data to send via a data packet to increase security of information and to be able to send the data with less noise and it can be sent over the phone lines.

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As to claim 12, Kr teaches wherein said electronic device is remotely located from a structure conditioned by the conditioning system is taught as the controller client is a handheld controller([0047]).

As to claim 13, Kr teaches wherein the communication link comprises a PSTN is taught as a telephone path such as a PSTN([0080]).

As to claim 14, Kr teaches wherein the conditioning system is interfaced to the PSTN is taught as coupled to a PSTN([0080]).

As to claim 16, Kr teaches wherein the communication link comprises a wired network is taught as wired([0080]).

As to claim 17, Kr teaches wherein the communication link comprises a wireless network is taught as wireless([0080]).

As to claim 18, Kr teaches wherein said electronic device controls a plurality of conditioning systems, said registration module storing profile information uniquely identifying each conditioning system is taught as a unique identification information is assigned to each one of the all home electronics([0094]).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 20-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krzyzanowski et al.(referred as Kr) further in view of Ito et al. and further in view of Saito et al.

Kr teaches the claimed invention (claim 20) substantially as claimed including a method for controlling a conditioning system comprising:

- a. Executing a control program in a remote electronic device is taught as the portable device as a computer client([0048] and [0047]).
- b. Inputting a control command representing a desired operation to be performed by the conditioning system is taught as a user interacts and alters the performance of devices([0012] and [0035]).

Kr teaches the above listed details of the independent claim 20, however, Kr does not teach: store profile information including an identification of a conditioning system to be controlled, generating a control command data packet based on the stored profile information and the inputted control command and transmitting the generated control command data packet over a communications link to the conditioning system associated with the profile information so that the conditioning system performs the desired operation.

Ito teaches:

- a. Store profile information including an identification of a conditioning system to be controlled the remote electronic device being distant from each conditioning systems, the profile information uniquely identifying each conditioning system is taught as the apparatus control table (col. 6 lines 37-67).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Ito et al. because Ito et al. deals with remote home appliance operating system such as an air conditioner using telephones and telephone to make it simpler and easier to use the telephone as a remote controlling device that can change various profile parameters of the air conditioner.

Saito et al. teaches :

- a. Generating a control command data packet based on the stored profile information and the inputted control command is taught as the IP packet are processed with destination IP address, source address and commands(page 3);
- b. Transmitting the generated control command data packet over a communications link to the conditioning system associated with the profile information so that the conditioning system performs the desired operation is taught as the IP packet is transmitted(page 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Saito et al. because Saito et al. discloses a system for home digital electronic control through a public network; a PSTN. Also it describes the example of an a air conditioner it allows the computer to store correspondence data and combine this data with command data to send via a data packet to increase security of information and to be able to send the data with less noise and it can be sent over the phone lines.

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As to claim 21, Kr teaches wherein the control program is executed by an electronic device remotely located from a structure conditioned by the conditioning system is taught as the controller client is a handheld controller([0047]).

As to claim 22, Kr teaches wherein the communication link comprises a PSTN is taught as a telephone path such as a PSTN([0080]).

As to claim 23, Kr teaches wherein transmitting the generated control command data packet over a communications link comprises transmitting the generated control command data packet over a PSTN is taught as using the PSTN as the communication link along with a control sent by the client computer over a communication link([0075] and [0080]).

As to claim 25, Kr teaches wherein transmitting the generated control command data packet over a communication link comprises transmitting the generated control command data packet over a wired network is taught as wired([0080]).

As to claim 26, Kr teaches wherein transmitting the generated control command data packet over a communications link comprises transmitting the generated control command data packet over a wireless network is taught as wireless([0080]).

As to claim 27, Kr teaches wherein the remote electronic device controls a plurality of conditioning systems, the control program being executed to store profile information uniquely identifying each conditioning system is taught as a unique identification information is assigned to each one of the all home electronics([0094]).

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 29, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krzyzanowski et al.(referred to Kr) further in view of Ito et al. and further in view of Saito et al.

Kr teaches the claimed invention (claim 29) substantially as claimed including a method for distantly controlling a plurality of conditioning systems comprising:

a. Executing a control program in a remote electronic device is taught as the portable device as a computer client([0048] and [0047]).

b. Inputting at least one control command representing at least one desired operation to be performed by at least one conditioning system of the plurality of conditioning systems is taught as a user interacts and alters the performance of devices([0012] and [0035]).

c. The remote electronic device being distant from each conditioning systems is taught as the controller client is a handheld controller([0047]).

d. The profile information uniquely identifying each conditioning system is taught as a unique identification information is assigned to each one of the all home electronics([0094]).

Kr teaches the above listed details of the independent claim 29, however, Kr does not teach: to store profile information for each conditioning system a plurality of conditioning systems to be controlled, generating at least one control command data

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packet based on the stored profile information related to the at least one conditioning system and the inputted at least one control command, transmitting the generated control command data packet over a telephone network to the at least one conditioning system to perform that at least one desired operation.

Ito et teaches:

a. To store profile information for each conditioning system a plurality of conditioning systems to be controlled is taught as the apparatus control table (col. 6 lines 37-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Ito et al. because Ito et al. deals with remote home appliance operating system such as an air conditioner using telephones and telephone to make it simpler and easier to use the telephone as a remote controlling device that can change various profile parameters of the air conditioner.

Saito et al. teaches :

a. Generating at least one control command data packet based on the stored profile information related to the at least one conditioning system and the inputted at least one control command is taught as the IP packet are processed with destination IP address, source address and commands(page 3);

b. Transmitting the generated control command data packet over a telephone network to the at least one conditioning system to perform that at least one desired operation is taught as the IP packet is transmitted(page 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Saito et al. because Saito et al. discloses a system for home digital electronic control through a public network; a PSTN. Also it describes the example of an a air conditioner it allows the computer to store correspondence data and combine this data with command data to send via a data packet to increase security of information and to be able to send the data with less noise and it can be sent over the phone lines.

As to claim 30, Kr teaches wherein transmitting the generated control command data packet over a telephone network comprises transmitting the generated control command data packet over at least one of a wired and a wireless network is taught as wired and is taught as wireless([0080]).

As to claim 32, Kr teaches wherein the remote electronic device includes a graphic user interface to facilitate inputting at least one control command is taught as a graphical user interface(touch screen)([0045]).

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krzyzanowski et al.(referred to Kr) further in view of Ito et al. and further in view of Saito et al. and further in view Maeda et al. Kr, Ito et al. and Saito teach the claimed invention (claim 29) see paragraph number 10 above.

As to claim 31, Maeda et al. teaches further comprising receiving monitoring information from at least one conditioning system so that the remote electronic device

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determines an operating state of the at least one conditioning system is taught as remote monitoring the operating state of the air conditioner(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Kr with the teachings of Maeda et al. invention discloses the idea of remote monitoring an air conditioner uses communication network or phone network Once you sense the status the user can decide what actions need to take place to correct the status or if is the correct status to keep status operating at the same state.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Rapp whose telephone number is (571)272-3752.

The examiner can normally be reached on Mon-Fri 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chad Rapp
Examiner
Art Unit 2125

cjr

Albert W. Paladini 12-27-04
ALBERT W. PALADINI
PRIMARY EXAMINER